Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A charge-air cooler for motor vehicles comprising:

a heat exchanger unit that includes tubes having tube ends and fins arranged between the tubes, and

a first header box arranged on one side of the tubes, wherein the first header box is configured to introduce a medium into the charge-air cooler, and a second header box arranged on another side of the tube, wherein the second head box is configured to discharge the medium from the charge-air cooler ~~at least one laterally arranged header box configured to introduce or discharge a medium~~, wherein each ~~the at least one~~ header box has a bottom with openings for receiving the tube ends, a cover and an inlet or outlet connecting pipe,

wherein the header boxes are ~~box is~~ at least partially produced by internal high-pressure forming (IHF) of a metallic semifinished product,

wherein each header box includes a longitudinal bead that extends along at least a long axis of the at least one header box,

wherein the longitudinal bead of the first header box is configured such that a cross section of the first header box decreases as a distance from the inlet connecting pipe of the first header box increases,

wherein the longitudinal bead of the second header box is configured such that a cross section of the second header box increases as a distance to the outlet connecting pipe of the second header box decreases.

2. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein only the cover is produced by IHF and is welded to the bottom.

3. (Previously Presented) The charge-air cooler as claimed in claim 2, wherein the semifinished product is a rolled aluminum sheet.

4. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein only the cover and the bottom are produced as a single piece from a semifinished product by IHF and

are connected to the connecting pipe with a cohesive material joint, in particular are welded or soldered thereto.

5. (Previously Presented) The charge-air cooler as claimed in claim 1, the bottom, the cover and the connecting pipe are produced as a single piece by IHF.

6. (Previously Presented) The charge-air cooler as claimed in claim 4, wherein the semifinished product is an extruded aluminum tube.

7. (Previously Presented) The charge-air cooler as claimed in claim 5, wherein the connecting pipe is prebent before the IHF process.

8. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein a part of the cover of the header box has a longitudinal bead produced by pressing from the outside and/or IHF from the inside.

9. (Currently Amended) A heat exchanger ~~a charge-air cooler~~ for motor vehicles, comprising:

a heat exchanger unit, that includes tubes having tube ends and fins arranged between the tubes, and

a first header box arranged on one side of the tubes, wherein the first head box is configured to introduce a medium into the charge-air cooler, and a second header box arranged on another side of the tube, wherein the second header box is configured to discharge the medium from the charge-air cooler ~~at least one laterally arranged header box configured to introduce or discharge a medium~~, wherein each ~~the at least one~~ header box has a bottom with openings for receiving the tube ends, a cover and an inlet or outlet connecting pipe,

wherein the header boxes are ~~box is~~ at least partially produced by internal high-pressure forming (IHF) of a metallic semifinished product,

wherein a part of the cover of each [[the]] header box has a longitudinal bead produced by pressing from the outside and/or IHF from [[the]] inside,

wherein the longitudinal bead of each header box ~~is of conical design and~~ has a cross section which increases in a direction pointing away from a respective [[the]] connecting pipe of a respective header box while a cross-sectional area of the respective header box decreases,

wherein the longitudinal bead of the first header box is configured such that a cross section of the first header box decreases as a distance from the inlet connecting pipe of the first header box increases,

wherein the longitudinal bead of the second header box is configured such that a cross section of the second header box increases as a distance to the outlet connecting pipe of the second header box decreases.

10. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein, after the IHF process, the header box has at least one open end surface which is closed by a cover.

11. (Previously Presented) The charge-air cooler as claimed in claim 4, wherein the openings in the bottom are produced by punching.

12. (Previously Presented) The charge-air cooler as claimed in claim 4, wherein the openings in the bottom are produced by prepunching before the IHF and/or by drawing through.

13. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein the header box has a wall thickness which, at least in some regions, is greater than 2 mm.

14. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein the header box has a wall thickness which, at least in some regions, is smaller than 5 mm.

15. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein the bottom has a curvature which, at least in some regions, has a radius of curvature greater than 100 mm.

16. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein the bottom has a curvature which, at least in some regions, has a radius of curvature smaller than 400 mm.

17. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein the bottom in the transition region to the cover has a curvature which, at least in some regions, has a radius of curvature greater than 5 mm.

18. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein the bottom in the transition region to the cover has a curvature which, at least in some regions, has a radius of curvature smaller than 20 mm.

19. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein the header box, at least in some regions has a step- and/or kink-free cross section.

20. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein a connecting pipe is designed as an end-side extension of the header box and is curved.

21. (Previously Presented) The charge-air cooler as claimed in claim 1, wherein the connecting pipe is arranged laterally on the header box.

22. (Previously Presented) The charge-air cooler as claimed in claim 4, wherein the cohesive material joint is a welded or soldered joint.

23. (Previously Presented) The charge-air cooler as claimed in claim 11, wherein the openings in the bottom are produced by punching counter to a hydraulic internal high pressure.

24. (Previously Presented) The charge-air cooler as claimed in claim 13, wherein the header box wall thickness is greater than 3 mm.

25. (Previously Presented) The charge-air cooler as claimed in claim 14, wherein the header box wall thickness is smaller than 4 mm.

26. (Previously Presented) The charge-air cooler as claimed in claim 15, wherein the bottom curvature, at least in some regions, has a radius of curvature greater than 200 mm.

27. (Previously Presented) The charge-air cooler as claimed in claim 16, wherein the bottom curvature, at least in some regions, has a radius of curvature smaller than 300 mm.

28. (Previously Presented) The charge-air cooler as claimed in claim 17, wherein the bottom curvature in the transition region to the cover, at least in some regions, has a radius of curvature greater than 10 mm.

29. (Previously Presented) The charge-air cooler as claimed in claim 18, wherein the bottom curvature in the transition region to the cover, at least in some regions, has a radius of curvature smaller than 15 mm.

30. (Canceled)

31. (Currently Amended) The charge-air cooler as claimed in claim 1 [[30]], wherein the longitudinal bead of each header box forms a depression in a surface of each ~~the at least one~~ header box.

32. (Canceled)

33. (Canceled)

34. (Previously Presented) The heat exchanger as claimed in claim 9, wherein the longitudinal bead extends along at least a long axis of the at least one header box.

35. (Previously Presented) The heat exchanger as claimed in claim 9, wherein the longitudinal bead forms a depression in a surface of the at least one header box.

36. (New) The charge-air cooler as claimed in claim 1, wherein the longitudinal bead has a conical or flattened design.

37. (New) The heat exchanger as claimed in claim 9, wherein the longitudinal bead has a conical or flattened design.

38. (New) A method of producing a heat exchanger comprising:

providing a semifinished product, and

using hydroforming to form the semifinished product into a header box comprising a longitudinal bead that extends along at least a long axis of the at least one header box such that a cross section of the header box decreases in area along the long axis of the header box.